AMENDMENTS TO THE CLAIMS

1. – 8. (CANCELED).

9. (AMENDED) ~~The method according to claim 1, wherein the step of finding an audio byte location in the audio further comprises the steps of~~ A method for synchronizing an elementary audio stream with an elementary video stream, the video stream having a plurality of markers containing information for displaying frames associated with the video stream, the method comprising the steps of:

sampling the markers in the video stream to obtain a time stamp and a memory stamp for each marker, the time stamp indicating a time position of the marker in the video stream, the memory stamp indicating a relative byte location for the marker in the video stream;

storing values of the time stamp and the memory stamp for each marker;

finding a video byte location in the video stream for a selected time position by reviewing stored values of the time stamps and memory stamps;

finding an audio byte location in the audio stream for the selected time position, wherein said finding further includes:

determining a total time value for the audio stream that represents an amount of time required to play the entire audio stream at a selected speed;

determining a total bytes value for the audio stream that represents the total number of bytes occupied by the audio stream; ~~and~~

calculating the audio byte location by multiplying the total bytes value by the selected time position and dividing by the total time value; and

whereby the audio and video streams are synchronized for output at the audio byte location and the video byte location.

10. – 15. (CANCELED).

16. (AMENDED) ~~The method according to claim 10 wherein the step of finding an audio byte location further comprises the steps of:~~ A method for synchronizing an elementary audio stream with an MPEG-2 video stream, the MPEG-2 video stream having a plurality of GOP markers, each GOP marker containing information for displaying a plurality of frames associated with that GOP marker, the method comprising the steps of:

sampling at least two of the GOP markers in the video stream to obtain a time stamp and a memory stamp for each GOP marker, the time stamp indicating a time position of the GOP marker in the video stream, the memory stamp indicating a relative byte location for the GOP marker in the video stream;

storing values of the time stamp and the memory stamp for each GOP marker in a GVP table;

finding a video byte location for a selected time position by reviewing the GVP table;

finding an audio byte location for the selected time position, wherein said finding further includes:

determining a total time value for the audio stream that represents an amount of time required to play the entire audio stream at a selected speed;

determining a total bytes value for the audio stream that represents the total number of bytes occupied by the audio stream; ~~and~~

calculating the audio byte location by multiplying the total bytes value by the selected time position and dividing by the total time value; and

whereby the audio and video streams are synchronized for output at the audio byte location and the video byte location.

17. – 24. (CANCELED).

25. (AMENDED) ~~The data processing system according to claim 17, wherein the step of finding an audio byte location in the audio stream further comprises the steps of:~~ A data processing system comprising a processor and a memory unit, wherein the data processing system performs the steps of:

sampling a plurality of markers in a video stream to obtain a time stamp and a memory stamp for each marker, the time stamp indicating a time position of the marker in the video stream, the memory stamp indicating a relative byte location for the marker in the video stream;

storing values of the time stamp and the memory stamp for each marker;

finding a video byte location in the video stream for a selected time position by reviewing stored values of the time stamps and memory stamps;

find an audio byte location in an audio stream for the selected time position, wherein said finding further includes:

determining a total time value for the audio stream that represents an amount of time required to play the entire audio stream at a selected speed;

determining a total bytes value for the audio stream that represents the total number of bytes occupied by the audio stream; ~~and~~

calculating the audio byte location by multiplying the total bytes value by the selected time position and dividing by the total time value; and

whereby the audio and video streams are synchronized for output at the audio byte location and the video byte location.

26. – 33. (CANCELED)

34. (AMENDED) ~~The software program product according to claim 26, wherein the instructions for finding an audio byte location in the audio stream further comprise instructions for:~~ A software program product stored on a computer readable medium comprising:

instructions for sampling a plurality of markers in a video stream to obtain a time stamp and a memory stamp for each marker, the time stamp indicating a time position of the marker in the video stream, the memory stamp indicating a relative byte location for the marker in the video stream;

instructions for storing values of the time stamp and the memory stamp for each marker;

instructions for finding a video byte location in the video stream for a selected time position by reviewing stored values of the time stamps and memory stamps;

instructions for finding an audio byte location in an audio stream for the selected time position, wherein said finding further includes:

determining a total time value for the audio stream that represents an amount of time required to play the entire audio stream at a selected speed;

determining a total bytes value for the audio stream that represents the total number of bytes occupied by the audio stream; ~~and~~

calculating the audio byte location by multiplying the total bytes value by the selected time position and dividing by the total time value; and

whereby the audio and video streams are synchronized for output at the audio byte location and the video byte location.